

The Commission's treatment of bad debt and collection costs is particularly unfair because the costs of coin collection were taken into account. Second Report and Order ¶ 55. (There is no bad debt associated with local coin calls because the coin must be deposited before the call is completed.) Even if the FCC lacked confidence in the numbers submitted to it, the Commission clearly erred by setting the cost at zero. The \$.04 per call figure documented by APCC is worthy of the Commission's respect; even if one accepts AT&T's argument that collection is likely to improve, and makes the wildly optimistic assumption that per-call collection and bad debt costs are likely to be cut in half, it is impossible to justify a figure below \$.02.

**D. The Commission's Treatment of ANI ii Costs Is Flawed**

*1. ANI ii Costs Must Be Allocated to Access Code and Subscriber 800 Calls, Not All Calls*

The Commission correctly found that ANI ii capital costs will, for the most part, be recovered through increased monthly payphone line charges, and that these charges are avoidable costs that should be added to the per-call compensation rate. See Second Report and Order ¶ 57. The Commission estimated monthly ANI ii line charges at \$5.65.<sup>8</sup> See id. So far, so good. But the Commission then divided this line charge by the total call volume at a low traffic location. See id. This is dead wrong.

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collection costs — until payphones were deregulated, they were not permitted to collect compensation for access and subscriber 800 calls. This should in no way cast doubt on the independent PSPs' numbers. To the contrary, Coalition experience with collection of interim compensation from IXC's suggests that the independents' estimates may well be conservative: to date, IXC's have simply refused to pay Coalition members interim compensation due to them, though this has not stopped the IXC's from charging their customers for the same.

<sup>8</sup>As discussed below, new information developed by USTA suggests that this number should be revised.

Recall that when the Commission addressed the cost of the local coin mechanism and coin box, it adjusted the local coin rate downward by the monthly cost of the coin mechanism divided by the number of coin calls. See id. ¶ 53 & n.140. The Commission's reasoning was straightforward (though entirely wrong, as we have demonstrated above): because dial-around and subscriber 800 calls could be made without the coin mechanism or coin box, their costs should not be attributed to dial-around and subscriber 800 calls. In effect, the Commission determined that it would be improper to allocate coin mechanism and coin box costs to subscriber 800 and dial-around calls because they do not need or make use of those devices.

The same should be true, however, with respect to coin calls and ANI ii costs. It is undisputed that special ANI ii digits are being implemented solely for the purpose of per-call compensation and tracking on subscriber 800 and access code calls. It is also undisputed that local coin calls do not require ANI ii coding digits to be completed. As a result, ANI ii costs cannot be allocated to local coin calls, and must be allocated to subscriber 800 calls alone.<sup>9</sup>

The Commission, however, failed to do this. When it calculated the per-call value of the ANI ii digits, it divided the \$5.65 monthly line charge by the total number of calls at a marginal location. In fact, it should have divided by the number of subscriber 800 and access code calls at a marginal location only.<sup>10</sup>

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<sup>9</sup>This is not merely an assertion by PSPs, who stand to benefit from such an allocation. Other parties, including AT&T, accepted that it would be inappropriate to allocate ANI ii costs to all calls, rather than just to dial-around and subscriber 800 calls. See AT&T Reply Comments at 32 & Attachment 5 (filed Sept 9, 1997).

<sup>10</sup>It is appropriate to use the marginal call volume here rather than the average call volume even though the ANI ii costs are fixed. Cf. supra at 13-14. That is because, by hypothesis, a marginal payphone earns no "economic rent," i.e., profits above the minimum necessary to stay

It is important to stress that unlike coin mechanism costs, ANI ii costs are avoidable; again, coin mechanism costs are not. In a free market — and in the absence of TOCSIA — there would be no reason for PSPs to incur ANI ii costs. Instead, they could choose to make exclusive deals with a single provider and block all other calls or, alternatively, arrange compensation amounts privately with IXC's that would reflect any necessary tracking expenses (incremental or fixed). It is only because TOCSIA prevents the free market from operating that regulatory intervention is required. Thus, even if a payphone would be uneconomical without per-call compensation revenues — as many marginal payphones might well be — ANI ii is properly considered an avoidable cost because it is not one that would be incurred in a free and competitive market. See Hausman Decl. ¶ 18.

2. *The Amount of ANI ii Costs Must Be Adjusted to Reflect New Data*

The foregoing demonstrates that the Commission put the wrong number in the denominator of the ANI ii cost fraction; data submitted by USTA indicates that the value in the numerator is also incorrect. See USTA Ex Parte (filed October 24, 1997). In this case, the error was in PSPs' favor.

As USTA has explained, the previous numbers relied upon by the Commission were based on data that suffered from various flaws. In the Second Report and Order, the Commission used as its starting point for ANI ii costs a figure of \$1.035 billion, supplied by USTA. The comparable figure in the revised USTA filing is \$434.6 million. See id. at 4. Adjusting the

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in operation. Therefore, if the marginal phone is not compensated for the full cost of ANI ii, it will become uneconomical. If ANI ii costs are allocated to average call volumes, the marginal phone will not recover the full added costs of ANI ii. See Hausman Decl. ¶ 19 n.11.

Commission's result for this change suggests a revised cost estimate for ANI ii of approximately \$2.18 per month per line. See Andersen Report at 10.

Again, this number must be allocated to access code and subscriber 800 calls only. This yields a per-call adjustment of \$.019 per call, \$.009 more than the Commission's value of \$.01.

See id.

**E. Proper Avoided Cost Analysis Indicates Per Call Compensation Should Be At Least \$.362**

The results demonstrated by the foregoing discussion are summarized in the table below.

See also Andersen Report at 1.<sup>11</sup>

| Avoided Cost Pricing Calculation   |               |                   |
|------------------------------------|---------------|-------------------|
| Category                           | FCC Order     | Coalition Revised |
| Market Price                       | \$.350        | \$.350            |
| <u>Deductions</u>                  |               |                   |
| Coin Mechanism                     | (\$ .031)     | (\$ .0062)        |
| Line Savings                       | (\$ .0275)    | (\$ .025)         |
| Collection & Maint.                | (\$ .0255)    | (\$ .0255)        |
| <u>Additions</u>                   |               |                   |
| Bad Debt/Collection                | 0             | \$.04             |
| ANI ii                             | \$.01         | \$.0188           |
| Interest                           | \$.008        | \$.0099           |
| Market-Based Per-Call Compensation | <u>\$.284</u> | <u>\$.3620</u>    |

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<sup>11</sup>The Andersen Report explains the need to provide for an upward adjustment in the interest cost imposed on PSPs by the delay in collection of per-call compensation to account for the foregoing adjustments to the Commission's various call count and call estimates. See Andersen Report at 10-11.

### III. THE COMMISSION'S BOTTOM-UP COST ESTIMATES UNDERSTATE PER-CALL COSTS

#### A. The Commission's Cost Calculation Is Biased Low

The Commission properly declined to rely on cost calculations in setting the per-call rate; but its cost calculations may have given the Commission a false sense of security. Had these calculations been performed properly — even taking the Commission's methodology for granted — they would have indicated that the average per-call costs of a marginal phone are higher than the default rate set by the Commission. This confirms what earlier analysis has demonstrated: the \$.284 rate threatens the statutory goal of widespread payphone deployment.

This is all the more worrisome because the Commission's methodology is designed to bias results for payphone costs on the low side. Even though the Commission properly used marginal rather than average call volumes to calculate per-call costs,<sup>12</sup> its methodology still failed to account for the fact that marginal phones are likely to have not only relatively low call volumes, but also relatively high costs. It therefore stands to reason that the Commission's methodology threatens those payphones that are most vulnerable — those located in rural and other high cost areas.

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<sup>12</sup>It is worth emphasizing again that per-call costs are properly based on marginal call volumes in this bottom-up calculation even though per-call adjustments to the market rate under an avoided cost “top down” methodology should rely on average call volumes for avoidable fixed costs. Using marginal call volumes in the former context simply accounts for the fact that the market price is set by the marginal producer, as Professor Hausman explains. See Hausman Decl. ¶ 20. In the latter context, the use of marginal call volumes will, on average, simply tax PSPs and location providers to enrich IXCs. See id. ¶ 20 & n.9; supra at 14-15.

**B. The Commission Repeated the Mistakes That Affected the Avoided Cost Calculation**

Even accepting the Commission's methodology, several of the empirical and methodological errors that affected the avoided cost calculation were repeated in calculating the bottom-up cost calculation. As the Andersen Report documents:

- the Commission's equipment figure was too low (because it excluded coin mechanism costs and in any event overcompensated for them);
- its ANI ii figure was improperly allocated;
- bad debt and collection costs were wrongly ignored; and
- the interest cost was too low as a result of the above errors.

Adjusting for these errors leads to the more realistic cost figure of \$.3115. See Andersen Report, at 12.

**C. The Commission Should Not Have Ignored Location Rents**

The Commission ignored the rents that PSPs must pay to location providers in calculating the expenses of a marginal phone. This was clearly wrong

The Commission's cost calculation was performed by dividing average costs by marginal call volumes. No one denies that PSPs must pay location providers rent in return for placing their payphones on the premises. The Commission noted that, on average, independent PSPs pay location providers \$45 in rent each month. See Second Report and Order ¶ 50. Even at an average location, this rental expense amounts to \$.065 per call. Coalition figures indicated a slightly lower figure: \$.05 per call. See Arthur Andersen, Critique of Cost Studies and Other Issues, at 8-9, attached to Coalition Reply Comments (filed Sept. 9, 1997).

The Commission never explains why it ignores these costs. One possible, though mistaken, rationale, is that under the Commission's marginal payphone analysis, see Second Report and Order ¶ 50, the location provider can charge the PSP no rent at all for the payphone placement. But competition for locations means that even marginal locations require rents. Indeed, data collected from Coalition members indicates that LECs pay on average \$29.22 per month in location fees; and this number is likely to rise as deregulated LEC PSPs are able, for the first time, to offer location providers a package of commissions on local and long distance calls.

As the Coalition explained in its Reply Comments, none of the other reasons offered by the parties to this proceeding justifies ignoring these rent expenses. Although it may be true, for example, that at present commissions are paid only on local and 0+ and 1+ calls,<sup>13</sup> there is no doubt that all calls made from a payphone depend upon payphone placement secured through such commissions; all calls should therefore bear a proportionate share of that expense. It is simply preposterous to exclude location rents from the cost calculation based on AT&T's rationale that such rents are "marketing costs." See Coalition Reply Comments at 29. Fees paid to location providers are real, unavoidable expenses that a PSP must pay; again, IXC's and PSPs alike benefit from payphone placement. IXC's in the past paid location providers commissions directly on 0+ and other calls made on LEC equipment. There is no reason why they should not pay on dial-around and subscriber 800 calls as well.

Finally, AT&T is correct that a bottom-up, cost-based regulatory proceeding requires the Commission to determine what constitutes a reasonable rent — just as the Commission is

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<sup>13</sup>See Reply Comments of Cable & Wireless, Inc., at 9 (filed Sept. 9, 1997).

required to decide what constitutes a reasonable equipment cost, line charge, or SG&A amount. AT&T thus offers a fine argument in favor of the Commission's market-based pricing approach. But it is also true that some costs are easier to measure than others; independent PSPs and LEC PSPs alike offered ample market evidence that location providers do require rents. To ignore this cost in calculating per-call costs simply offers IXCs a free ride on dial-around and subscriber 800 calls.

As the Andersen Report shows, per-call costs, including location rents and interest, total \$.3757. See Andersen Report at 13.

Respectfully submitted,



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**Report of Arthur Andersen LLP  
Second Report and Order: Issues for Reconsideration**

**Carl R. Geppert**

**December 1, 1997**

## Report of Arthur Andersen LLP Second Report and Order: Issues for Reconsideration

Arthur Andersen LLP was asked to prepare this report for the RBOC/GTE/SNET Payphone Coalition in response to the Federal Communications Commission's ("the FCC" or "the Commission") Second Report and Order ("the Order"), released on October 9, 1997. In summary, we reviewed the calculations performed by the FCC in computing per-call compensation ("PCC") and, where applicable, quantified the impact of any inaccuracies. The following is a brief overview of our findings:

- ♦ Market-Based Compensation Analysis: The following table summarizes the adjustments made to the Commission's market-based PCC calculation, followed by a brief description of each adjustment:

| <u>Category</u>           | <u>Order</u>    | <u>Revised<br/>PCC</u> |
|---------------------------|-----------------|------------------------|
| Market Price              | \$0.3500        | \$0.3500               |
| <u>Deductions:</u>        |                 |                        |
| Coin Mechanism            | (0.0310)        | (0.0062)               |
| Line Savings              | (0.0275)        | (0.0250)               |
| Collections & Maintenance | (0.0255)        | (0.0255)               |
| <u>Additions:</u>         |                 |                        |
| Bad Debt/Collections      | 0.0000          | 0.0400                 |
| ANI ii                    | 0.0100          | 0.0188                 |
| Interest                  | <u>0.0080</u>   | <u>0.0099</u>          |
| Market-Based PCC          | <u>\$0.2840</u> | <u>\$0.3620</u>        |

- ✓ Coin Mechanism Costs: We believe that coin mechanism costs should be treated as "necessary" rather than "avoided." To illustrate our point, we have included several examples showing the significant per-call costs of operating payphones without coin mechanisms. In addition, it appears that the Commission overstates the impact of coin

mechanism costs.<sup>1</sup> Correcting the Commission's calculations increases PCC.

✓ Line Savings: The Commission inappropriately computes the "low" range value for line savings.<sup>2</sup> Correcting this oversight increases PCC.

✓ Bad Debt/Collection Charges: The Commission inappropriately ignores bad debt/collection charges due to the lack of "sufficient information."<sup>3</sup> Considering the fact that the Coalition was prohibited from collecting dial around compensation from inter-exchange carriers, it is unreasonable to expect them to produce relevant estimates. However, the cost estimates provided by Peoples Telephone Company, Inc. ("Peoples") and the American Public Communications Council ("APCC") are reasonable surrogates for the payphone industry. Including bad debt and collections charges in the Commission's calculations increases PCC.

✓ ANI ii Costs: The Commission inappropriately calculated the per-call impact of ANI ii costs by using total payphone call counts rather than access code and subscriber 800 call counts.<sup>4</sup> This methodology is inconsistent with the Commission's treatment of coin mechanism costs<sup>5</sup>. Using the relevant call types increases PCC.

- Cost-Based Compensation Analysis: The same oversights noted above also impact the Commission's calculation of PCC based upon costs. In addition, the Commission ignored certain costs that must be incurred to provide basic payphone service. The following table summarizes the impact of correcting the Commission's oversights:

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<sup>1</sup> See, Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, CC Docket No. 96-128, Second Report and Order (October 9, 1997), at 53 [hereinafter "Second Report and Order"].

<sup>2</sup> Id., at 54.

<sup>3</sup> Id., at 56.

<sup>4</sup> Id., at 57.

<sup>5</sup> Id., fn. 140.

| <u>Category</u>          | <u>Order<sup>6</sup></u> | <u>Revised PCC</u> |
|--------------------------|--------------------------|--------------------|
| Equipment                | \$0.0780                 | \$0.0842           |
| Maintenance              | 0.0450                   | 0.0450             |
| Payphone Lines           | 0.0700                   | 0.0700             |
| Depreciation/Overhead    | 0.0535                   | 0.0535             |
| ANI ii                   | 0.0100                   | 0.0188             |
| Bad Debt/Collection      | 0.0000                   | 0.0400             |
| Location Rental Payments | 0.0000                   | 0.0539             |
| Interest                 | <u>0.0075</u>            | <u>0.0103</u>      |
| Cost-Based PCC           | <u>\$0.2640</u>          | <u>\$0.3757</u>    |

## **SECTION I: CRITIQUE OF MARKET-BASED COMPENSATION ANALYSIS**

At the Coalition's request, we reviewed the Commission's computation of PCC using the avoided cost methodology and found several errors and misinterpretations.

### **A. Coin Mechanism Costs**

#### **1. Coin Mechanism Costs are Not Avoidable**

As noted in our previous reports dated August 26, September 9 and October 1, 1997, coin mechanism costs should be treated as "necessary", not avoided<sup>7</sup>. But for coin mechanisms, nearly all payphones would not exist or would be removed due to unprofitability. Coalition-provided data suggests that only 1.6% of Coalition payphones are public-coinless payphones (i.e., non-inmate and non-semi-public). Of those, approximately 93% are located indoors. Independent payphone providers support these findings. As stated by Peoples and accurately summarized by the Commission, "PSPs...maintain that few locations could support a coinless instrument."<sup>8</sup>

<sup>6</sup> Average of the Commission's low and high estimates. See, Second Report and Order, fn. 289.

<sup>7</sup> See, Comments of the RBOC/GTE/SNET Payphone Coalition, "Report of Arthur Andersen on Per-Call Compensation and Cost Calculations", Carl Geppert (August 26, 1997), pp. 3-4; Reply Comments of the RBOC/GTE/SNET Payphone Coalition, "Critique of Cost Studies and Other Issues", Carl Geppert (September 9, 1997), pg. 14; Ex Parte Comments of the RBOC/GTE/SNET Payphone Coalition, "Further Report of Arthur Andersen on Avoided Costs for Coin and Coinless Payphones, and Amended Critique Of AT&T's Cost Model", Carl Geppert (October 1, 1997), pg. 1 [hereinafter "Andersen Reports"].

<sup>8</sup> See, Second Report and Order, at 43.

The following example, using data taken from the Order, more accurately illustrates the per-call costs of operating a coinless payphone:

| <u>Cost Category</u>                   | <u>Average<br/>Coinless<br/>Payphone<sup>9</sup></u> | <u>Marginal<br/>Coinless<br/>Payphone<sup>10</sup></u> |
|--|--|--|
| Equipment Cost                         | \$0.027  | \$0.034  |
| Equipment Maintenance                  | 0.134  | 0.171  |
| Line Costs                             | 0.209  | 0.265  |
| Overhead                               | 0.160  | 0.203  |
| Other:                                 |  |  |
| ANI ii                                 | 0.038  | 0.049  |
| Bad Debt/Collection                    | 0.000  | 0.000  |
| Interest                               | 0.016  | 0.020  |
| Subtotal                               | \$0.584  | \$0.742  |
| Location Rental Payments <sup>11</sup> | 0.054  | 0.054  |
| Total Cost Per Call                    | <u>\$0.638</u>                                       | <u>\$0.796</u>   |

It is unrealistic to assume that the average payphone service provider ("PSP") could collect coinless call compensation to cover the costs shown above. Considering the above results, it appears that the provision of payphone service is dependent upon the availability of coin mechanisms. Therefore, coin mechanism costs should not be treated as avoided and should not be deducted from the market rate.

## 2. The Commission Overstates Coin Mechanism Avoided Costs by Using Marginal Payphone Call Counts

Even though coin mechanism costs are a necessary component in providing payphone service, we reviewed the Commission's calculation of coin mechanism costs<sup>12</sup> and conclude that the Commission overstated the per-call impact of coin mechanism costs and, consequently, understated

<sup>9</sup> Calculated based on 182 coinless calls per month (147 access code and subscriber 800 calls + 35 other coinless calls). Infra., section I.A.2.

<sup>10</sup> Calculated based on 143 coinless calls per month (116 access code and subscriber 800 calls + 27 other coinless calls). Infra., section I.A.2.

<sup>11</sup> The Coalition pays, on average, \$29.22 per month to premise owners. This amounts to \$0.054 per call for an average station with 542 coin, 411, 555 and other calls.

<sup>12</sup> Id., at 53.

PCC. Specifically, the Commission's market-based compensation analysis inappropriately used "marginal" call counts to compute the necessary offsets for fixed coin mechanism costs.<sup>13</sup> Computing offsets for fixed costs using marginal payphone call counts artificially "taxes" average payphones by reducing compensation beyond the avoided fixed cost. For example, the Commission computed the offset associated with fixed coin mechanism costs to be \$12.36 per month, which equates to a per-call amount on a marginal phone of \$0.031.<sup>14</sup> When applied to an average payphone with 507<sup>15</sup> coin calls per month, the avoided coin mechanism cost exceeds the fixed coin mechanism investment (i.e., \$0.031 x 507 = \$15.72 per month). The following table illustrates this point:

|   | <u>Marginal Phone</u> | <u>Average Phone</u> |
|---|-----------------------|----------------------|
| Fixed Coin Mechanism Investment         | \$12.36               |                      |
| Coin Calls of Marginal Phone            | $\div$ 399            |                      |
| Avoided Cost per Marginal Payphone Call | \$0.031               | \$0.031              |
| Coin Calls of Average Phone             |                       | $\times$ 507         |
| Avoided Cost per Average Payphone       |                       | <u>\$15.72</u>       |

To correct this inconsistency, the Commission should use average payphone call counts for this fixed cost. The following table summarizes the relevant call counts:

| <u>Call Category</u>         | <u>APCC<br/>Call Study<sup>16</sup></u> |          | <u>APCC<br/>Average Phone<sup>17</sup></u> | <u>APCC<br/>Marginal Phone<sup>18</sup></u> |
|------------------------------|---|----------|--|---|
|                              | <u>#</u>                                | <u>%</u> | <u>#</u>                                   | <u>#</u>                                    |
| PCC-Eligible<br>Coin & Other | 152                                     | 21.32%   | 147  | 116   |
| Coin, 411 & 555              | 525                                     | 73.63%   | 507  | 399   |
| Other                        | 36                                      | 5.05%    | 35   | 27  |
| Subtotal                     | 561                                     | 78.68%   | 542  | 426   |
| Total                        | 713                                     | 100.00%  | 689  | 542   |

<sup>13</sup> Id.

<sup>14</sup> Id.

<sup>15</sup> 494 coin calls per month for an average station, adjusted to include 13 directory assistance calls (i.e., 411 and 555 calls). See, Second Report and Order, at 49 and fn. 127.

<sup>16</sup> See, Comments of the American Public Communications Council (August 26, 1997), Attachment 4 [hereinafter "APCC Comments"].

<sup>17</sup> See, Second Report and Order, at 49 and fn. 127.

<sup>18</sup> Id., at 50, fn. 132 and fn. 140.

3. The Commission Overstates Coin Mechanism Avoided Costs by Overstating the Actual Cost of Coin Mechanisms

In the Order, the Commission overstated the cost of coin mechanisms<sup>19</sup> and, consequently, understated PCC. First, the Commission inappropriately assumed that the payphone industry uses smart coin sets.<sup>20</sup> In paragraph 53 of the Order, the Commission computes the cost of coin mechanisms as the difference between the low smart set cost quoted by AT&T and the cost of an 11A payphone. Based upon Coalition-provided data, less than 25% of all coin payphones are smart sets. The balance are dumb coin sets. Simply adjusting the Commission's calculation by using the low value of AT&T's dumb set cost estimate (\$600)<sup>21</sup> reduces the coin mechanism cost estimate to \$410 (\$600 - \$250<sup>22</sup> + \$60<sup>23</sup> incremental installation charge).

The Commission's comparison of a dumb or smart coin set and the 11A coinless set is, however, fundamentally flawed and does not achieve the Commission's intended goal of comparing coin and coinless sets of equal durability and functionality.<sup>24</sup> After discussing the functionality and durability of the coinless 11A payphone with Coalition members, it is our understanding that the 11A payphone is not comparable to the standard dumb or smart coin set primarily because the 11A payphone housing is made of less durable materials that are susceptible to outdoor elements. This explanation is different from the Commission's belief that the stronger housing is intended to prevent theft only.<sup>25</sup> To support this theory, we collected station statistics from Coalition members which show that nearly 93% of the

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<sup>19</sup> Id., at 53.

<sup>20</sup> Id.

<sup>21</sup> See, AT&T Comments, Affidavit of David Robinson (August 26, 1997), at 5; [hereinafter "Robinson Affidavit"].

<sup>22</sup> See, Second Report and Order, at 53; Robinson Affidavit, at 5.

<sup>23</sup> See, Second Report and Order, at 53; Robinson Affidavit, at 7.

<sup>24</sup> See, Second Report and Order, fn. 136.

<sup>25</sup> Id.



Coalition's public coinless stations that are similar to the 11A payphones are located at indoor facilities due to durability issues (e.g., weather, etc.). These payphones account for less than 1% of all Coalition payphones.

Considering that the 11A is not comparable to the standard dumb coin set, we set out to quantify a more reasonable estimate of the cost of a coin mechanism. To do so, we asked Coalition members to collect three pieces of information:

- a) We asked Coalition members to provide the average useful lives of their small inventory of coinless payphone sets. On average, the useful life of a coinless set similar in nature and functionality to the 11A payphone is approximately 7 years. In comparison to the 10-year average coin payphone life cited by the Commission,<sup>26</sup> the average coinless payphone is expected to last only 70% of the life of the average coin payphone. In other words, the PSP has to purchase 1.43 coinless stations to match the useful life of the average coin payphone. Consequently, we have adjusted the Commission's cost of the coin mechanisms as follows:

|  | <u>Cost</u>  |
|--|--------------|
| Average Dumb Coin Set Cost                           | \$600        |
| Average 11A Payphone of Comparable Useful Life       |              |
| Average 11A Payphone Cost                            | \$250        |
| Useful Life Factor                                   | <u>1.43</u>  |
| Adjusted 11A Payphone Set Cost                       | \$358        |
| Difference   | \$242        |
| Coin Mechanism Installation Adjustment <sup>27</sup> | <u>34</u>    |
| Total Coin Mechanism Costs                           | <u>\$276</u> |

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<sup>26</sup> Id., fn. 139.

<sup>27</sup> The Commission estimates that it costs approximately \$60 more to install a coin payphone than a coinless payphone (\$120 for coin, \$60 for coinless; see Second Report and Order, at 53; Robinson Affidavit, at 7). We have reduced this figure by \$26 (= 0.43 x \$60), however, due to the unnecessary costs of installing an additional coinless payphone to match the useful life of the standard coin payphone.

- b) We also asked Coalition members to gather price quotes for coinless sets of equal look, durability and functionality to the standard dumb coin set, absent all coin mechanisms. The average quote from Coalition payphone vendors was \$370. Using this average, along with the useful life factor described above, we have recomputed the coin mechanism costs using the Commission's comparison methodology to be \$105 (\$600<sup>28</sup> average dumb coin payphone compared to \$529 (\$370 x 1.43) for a comparable coinless payphone, plus \$34 installation charge<sup>29</sup>).
- c) We also asked Coalition members to gather price quotes regarding coin mechanism replacement parts. This included the cost of the acceptor/validator, relay, hopper, cashbox, cashbox lid, coin return and signal unit. The average total cost of all coin mechanism replacement parts for a dumb set was \$195. Including the incremental installation cost of \$34<sup>30</sup> increases this figure to \$229.

Using the simple average of the three coin mechanism figures identified above, \$203 ( $[\$276 + \$105 + \$229]/3$ ), we have revised the Commission's per-call value of this cost category to be \$0.0062.<sup>31</sup>

## B. Line Savings

The Commission makes a simple methodological error by computing the low range of line savings costs by averaging AT&T's cost estimate with Communications Central Inc.'s ("CCI's") cost estimate.<sup>32</sup> This is inappropriate because the Commission previously used AT&T's cost estimate as the

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<sup>28</sup> See, Robinson Affidavit, at 5.

<sup>29</sup> Supra., at fn. 27.

<sup>30</sup> Id.

<sup>31</sup> Computed using a return on investment of 15.76% and a 10-year depreciable life. We divided the monthly investment of \$3.16 by the number of coin, 411 and 555 calls from an average payphone (507). The 15.76% return on investment incorporates an 11.25% rate of return, a 44.2% debt ratio, an 8.8% cost of debt and a 34% tax rate.

<sup>32</sup> See, Second Report and Order, fn. 141.

high range value. Correcting this error produces a low range value of \$0.02 per call. Therefore, the average line savings should be \$0.025.<sup>33</sup>

### C. Bad Debt/Collections Charges

The Commission inappropriately excluded the per-call impact of bad debt/collections charges based upon the lack of "sufficient information." It is our understanding that the APCC gathered data from their members suggesting a per-call impact of \$0.04 due to bad debt and collections expenses.<sup>34</sup> In addition, it is unreasonable to assume that the Coalition should have supplied data regarding this cost category. Coalition members were explicitly prohibited from collecting the access code compensation<sup>35</sup> referred to by Peoples and the APCC in their Comments.<sup>36</sup> Consequently, the Coalition has no reliable historical data regarding access code bad debt and collections charges. We believe the Commission should rely upon the APCC's and Peoples' cost estimates and value bad debt and collections expenses at \$0.04 per call.<sup>37</sup>

### D. ANI ii Costs

When the Commission calculated the avoided cost of a coin mechanism, it determined the cost per coin call. On the other hand, the Commission calculated the cost of ANI ii per call, including both coin and coinless calls. In the same way that the Commission alleges that coin mechanism provides a benefit for coin calls and provides no benefit for access code and subscriber 800 calls, the ANI ii

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<sup>33</sup> Computed as the average of \$0.02 and \$0.03; See, Second Report and Order, fn. 141.

<sup>34</sup> See, APCC Comments, pp. 14-15.

<sup>35</sup> See, Policies and Rules Concerning Operator Service Access and Pay Telephone Compensation, CC Docket No. 91-35, Second Report and Order (May, 1992), fn. 1.

<sup>36</sup> See, Comments of Peoples Telephone Company, Inc. (August 26, 1997), pg. 13 [hereinafter "Peoples Comments"]; APCC Comments, pg. 14.

<sup>37</sup> See, Peoples Comments, pg. 13; APCC Comments, pp. 14-15.

investment benefits access code and subscriber 800 calls only, not all calls. Even though the cost of implementing ANI ii digit tracking is expected to be recovered through an increase in the access line charge, such a cost is a direct result of facilitating compensation for subscriber 800 and access code calls. Therefore, the Commission should allocate additional ANI ii tracking costs to access code and subscriber 800 calls only.

The amount of ANI ii costs necessary to fulfill the Commission's ANI ii digit tracking requirements is currently subject to debate. It is our understanding that the United States Telephone Association ("USTA") has recently revised their estimate of the cost to provide ANI ii digit tracking. The following table compares the Commission's ANI ii costs to the revised figures provided by USTA. The costs are spread across 2,000,000 payphones<sup>38</sup> and are translated to a cost per access code and subscriber 800 call only, using 116 calls per month for a marginal payphone<sup>39</sup>.

|                             | <u>Order<sup>40</sup></u> | <u>USTA</u>          |
|-----------------------------|---------------------------|----------------------|
| Total Cost (millions)       | \$1,035                   | \$434.6              |
| Reduction Factor            | <u>57.97%</u>             | <u>57.97%</u>        |
| Payphone Cost (millions)    | \$600                     | \$251.9              |
| Cost per Station            | \$5.65                    | \$2.18 <sup>41</sup> |
| Cost per Call <sup>42</sup> | <u>\$0.0487</u>           | <u>\$0.0188</u>      |

<sup>38</sup> See, Form 10-K of Peoples Telephone Company, Inc. (December 31, 1996), pg. 5.

<sup>39</sup> See, Hausman Declaration (December 1, 1997), fn. 12.

<sup>40</sup> See, Second Report and Order, at 57.

<sup>41</sup> USTA costs per station were computed using a return on average assets of 15.76% and a depreciable life of 10 years for switch equipment and 7 years for software. The 15.76% return on investment incorporates an 11.25% rate of return, a 44.2% debt ratio, an 8.8% cost of debt and a 34% tax rate.

<sup>42</sup> Computed using 116 access code and subscriber 800 calls for a marginal station.

### E. Interest Costs

The Commission computes the impact of interest costs by multiplying 11.25%, for three months, times the market rate (\$0.35) adjusted for avoided and added costs<sup>43</sup>. Taking into consideration the revisions we made to the Commission's use of call counts and cost estimates, we have recomputed the interest adjustment as follows:

| <u>Category</u>                | <u>Amount</u>   |
|--------------------------------|-----------------|
| Market Price                   | \$0.3500        |
| <u>Deductions:</u>             |                 |
| Coin Mechanism                 | (0.0062)        |
| Line Savings                   | (0.0250)        |
| Collections & Maintenance      | (0.0255)        |
| <u>Additions:</u>              |                 |
| Bad Debt/Collections           | 0.0400          |
| ANI ii                         | 0.0188          |
| Subtotal                       | 0.3521          |
| Interest (11.25% for 3 Months) | <u>\$0.0099</u> |

### F. Revised Market-Based PCC

Taking into consideration the issues discussed above, we have recalculated the market-based PCC. The following table compares our findings to those of the Commission:

| <u>Category</u>           | <u>Order</u>    | <u>Adjustment</u> | <u>Revised PCC</u> |
|---------------------------|-----------------|-------------------|--------------------|
| Market Price              | \$0.3500        | -                 | \$0.3500           |
| <u>Deductions:</u>        |                 |                   |                    |
| Coin Mechanism            | (0.0310)        | 0.0248            | (0.0062)           |
| Line Savings              | (0.0275)        | 0.0025            | (0.0250)           |
| Collections & Maintenance | (0.0255)        | 0.0000            | (0.0255)           |
| <u>Additions:</u>         |                 |                   |                    |
| Bad Debt/Collections      | 0.0000          | 0.0400            | 0.0400             |
| ANI ii                    | 0.0100          | 0.0088            | 0.0188             |
| Interest                  | <u>0.0080</u>   | <u>0.0019</u>     | <u>0.0099</u>      |
| Market-Based PCC          | <u>\$0.2840</u> | <u>0.0780</u>     | <u>\$0.3620</u>    |

<sup>43</sup> See, Second Report and Order, at 60.

## SECTION II: CRITIQUE OF COST-BASED COMPENSATION ANALYSIS

We were also asked to review the Commission's cost-based compensation analysis. In summary, we believe the Commission significantly understated the per-call cost of carrying access code and subscriber 800 calls.

### **A. Several Findings from Our Market-Based Compensation Analysis Affect the Cost-Based Calculations**

Many of the findings from our market-based compensation analysis also apply to the Commission's cost-based study. For the same reasons stated in sections I.A through I.F of this report, the Commission has incorrectly computed the cost of handling access code and subscriber 800 calls. Specifically, our revised calculations regarding coin mechanism costs, bad debt/collection charges and ANI ii costs increase the Commission's cost-based PCC. Excluding property location rental payments (discussed below) and interest factors, the following table summarizes our revised per-call estimates (see footnotes for explanations of each item):

| <u>Category</u>       | <u>Order</u> <sup>44</sup> | <u>Revised PCC</u>     |
|-----------------------|----------------------------|------------------------|
| Equipment             | \$0.0780                   | \$0.0842 <sup>45</sup> |
| Maintenance           | 0.0450                     | 0.0450                 |
| Payphone Lines        | 0.0700                     | 0.0700                 |
| Depreciation/Overhead | 0.0535                     | 0.0535                 |
| ANI ii                | 0.0100                     | 0.0188 <sup>46</sup>   |
| Bad Debt/Collection   | 0.0000                     | 0.0400 <sup>47</sup>   |
| Subtotal              | \$0.2565                   | \$0.3115               |

<sup>44</sup> Computed as the average of the Commission's high and low estimates. See, Second Report and Order, fn. 289.

<sup>45</sup> Computed by subtracting the average coin mechanism investment of \$203 from the average of Peoples' and CCI's depreciable payphone-related investment ( $\$3,017 = [\$3,234 + \$2,799]/2$ ), which amounts to \$43.76 per month (using a 15.76% rate of return and a 10-year depreciable life). We included the average of Peoples' and CCI's additional monthly investments ( $\$1.90 = [\$1.79 + \$2.01]/2$ ) with the monthly equipment investment and divided the sum by the number of calls from a marginal payphone (542). The 15.76% return on investment incorporates an 11.25% rate of return, a 44.2% debt ratio, an 8.8% cost of debt and a 34% tax rate. See, Second Report and Order, at 106; Supra., at section I.A.

<sup>46</sup> Supra., at section I.D.

<sup>47</sup> Supra., at section I.C.

## B. The Commission Ignores the Impact of Property-Owner Rental Expenses

In paragraph 62 of the Order, the Commission chose to ignore commissions paid to location owners because certain commenters argue that commissions are not just and reasonable. This is simply not true. "Commissions" are no more than property rental payments paid to location owners for the privilege of placing a payphone on their premises. But for commissions, PSPs would be unable to secure locations for the provision of payphone service (i.e., payphone service would not be available). Coalition members pay commissions on nearly all of their public payphones. Using Coalition-provided data, we calculated the per-call cost impact of location rental payments and revised the cost-based per-call compensation as follows:

|   | Revised<br>Cost-Based<br>PCC |
|---|------------------------------|
| Cumulative Costs per PCC-Related Call (Excluding Interest and Location Rental Payments) | \$0.3115 <sup>48</sup>       |
| Coalition Location Rental Payment Per Call  | 0.0539 <sup>49</sup>         |
| Cumulative PCC-Related Costs Before Interest  | \$0.3654                     |
| Interest (11.25% for 3 months) <sup>50</sup>  | 0.0103                       |
| Total Cost-Based PCC  | \$0.3757                     |

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<sup>48</sup> Supra., at section II.A.

<sup>49</sup> Supra., fn. 11.

<sup>50</sup> Supra., fn. 43.





Declaration of Professor Jerry A. Hausman

I, Jerry A. Hausman, do hereby declare as follows:

1. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139. I submitted a previous declaration in the Remand phase of this proceeding, dated August 25, 1997.

2. In this declaration I consider certain issues in the Commission's Second Report and Order. I discuss the points of my agreement and disagreement with the Commission's decision based on economic analysis. I also identify and correct methodological errors made by the Commission in calculating coin mechanism and ANI ii costs which have a significant effect on the regulated default rate for per-call compensation for dial-around and subscriber 800 calls.

I. Use of Demand Elasticities

3. In my first declaration I explained how competitive firms facing joint and common costs use demand elasticities to help set their competitive prices as markups over marginal costs. See Declaration of Professor Jerry A. Hausman, accompanying Comments of the RBOC/GTE/SNET Payphone Coalition (Aug. 26, 1997) ("First Decl."), ¶¶ 20-21. I concluded that when differences in demand elasticities between coin calls and dial-around and subscriber 800 calls are taken into account, the competitive price for dial-around and subscriber 800 calls would be higher than for coin calls due to the lower derived demand elasticities for dial-around and subscriber 800 calls. First Decl. ¶ 29. The Commission discusses my economic analysis in ¶¶ 64-67 of the Second Report and Order. While not disagreeing with the analysis, the Commission concluded that the demand elasticities for dial-around and subscriber 800 calls are significantly more responsive to price than my estimates suggest. Because the record did not yield adequate information to